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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,966	11/06/2001	Curtis A. Vock	397057	8991

7590 03/28/2002

Curtis A. Vock, Esq.
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Boulder, CO 80301

EXAMINER	
WACHSMAN, HAL D	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER

ART UNIT	PAPER
	2

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Hal D Wachsman
Primary Examiner
Art Unit: 2857

PTO-90C (Rev.3-98)

Office Action Summary	Application No. 09/992,966	Applicant(s) VOCK ET AL.	
	Examiner Hal D Wachsman	Art Unit 2857	

-- Th MAILING DATE f this communication app ars on the cov r sh t with th correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 November 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1. The drawings are objected to by the Draftsperson's. In addition, the Examiner objects to Figures 13, 14, 16-19, 25-27, 29, 41, 49, 76 and 77, because labeling (i.e. in words) is needed in these figures so as to facilitate an understanding of the invention from the drawings. Appropriate correction is required.

2. The Related Applications section on page 1 of the specification states that priority is also being claimed to U.S. application serial numbers 08/867,083 and 08/764,758 as well as to provisional application 60/077,251. The Related Applications section does not provide the current status of 08/867,083 as well as how this application relates to the pa[illegible]ed that 08/764,758 issued 9-28-99 and was not [illegible]ation was filed on 11-06-01. The Related Ap[illegible]w 08/764,758 relates to 08/867,083. In [illegible]ation is different than that of the instant applicati[illegible]f the instant application as a provisional appli[illegible]rom the time of filing. Thus, it is not clear the b[illegible]th respect to the provisional application. In ac[illegible] application, makes no reference to U.S. application serial numbers 08/867,083 and 08/764,758. Appropriate explanation/correction is required.

Note: STIC search requested 1-28-03

3. On page 97, before the first claim, there is no claim introduction statement such as "What is claimed is:" as the Applicant has included this in the last sentence on page 96. Appropriate correction is required.

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

5. Claims 1 and 15 are objected to under 37 C.F.R. 1.75(i) because each step of these claims are not separated by a line indentation. Appropriate correction is required.

6. Claims 2-20 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. All the claims that depend from claims 1 and 15 cite "A method..." which should be "The method...". Claim 2, line 2, cites "the sensor" which should be "the mobile sensor". Claim 8 cites "...the sensor determining an aggressiveness of each of the persons..." which is confusing as to how the sensor detects a human emotion. Claim 9, line 1, cites "the sensor" however is this referring to the mobile sensor ? This same type of problem also occurs in claims 11-14. In claim 14, "PSD" needs to be defined. Claim 15, line 1, cites "assessing athletic performance" but athletic performance of what exactly is being referred to here ? The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 8 cites "the sensor determining an aggressiveness of each of the persons during athletic activity" however a sensor which determines aggressiveness in athletic activity along with an explanation of how this determination is made, cannot be found in the specification.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10. Claims 1, 2, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Root et al. (6,013,007).

As per claim 1, Root et al. (see at least abstract) disclose the coupling, downloading and processing steps.

As per claim 2, Root et al. (Abstract, figures 6, 10) disclose the feature of this claim.

As per claims 12 and 13, Root et al. (see at least abstract) disclose the features of each of these claims.

11. Claims 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Marinelli (6,148,271).

As per claim 15, Marinelli (see at least abstract) discloses both the integrating and processing steps. Marinelli (Abstract, col. 2 lines 44-47) discloses the wirelessly transmitting step.

As per claim 16, Marinelli (col. 3 lines 10-16) discloses the feature of this claim.

As per claims 17 and 18, Marinelli (see at least abstract) discloses the features of each of these claims.

12. Claims 15, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Landsman (4,822,042).

As per claim 15, Landsman (see at least abstract) discloses the integrating step. Landsman (Abstract, figure 3A) discloses the processing step. Landsman (Abstract, col. 3 lines 63-68) discloses the wirelessly transmitting step.

As per claims 19 and 20, Landsman (see at least abstract) discloses the features of each of these claims.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marinelli (6,148,271) in view of Landsman (4,822,042).

As per claims 19 and 20, Landsman (see at least abstract) teaches the features of each of these claims. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Landsman to the invention of Marinelli as specified above because Marinelli (see at least abstract) measures movable objects such as tennis balls and the tennis racquet of Landsman is also a movable object used to hit tennis balls.

15. Claims 1, 2, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busack (6,020,851) in view of Eriksson (4,089,057).

As per claim 1, Busack (see at least abstract) discloses the coupling, downloading and processing steps with the exception of clearly disclosing that the performance being compared is athletic performance. However, Eriksson (Abstract, col. 1 lines 8, 9, 13-15) teaches this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Eriksson to the invention of Busack as specified above because both references deal with monitoring racing competitions, the auto race in Busack and the slalom racing events in Eriksson.

As per claim 2, Busack (Abstract, col. 3 lines 24-32) discloses the feature of this claim.

As per claim 11, Busack (see at least abstract) discloses the feature of this claim.

As per claim 14, it would have been obvious to a person of ordinary skill in the art at the time the invention was made that power spectral density was notoriously well known in the art as the Fourier transform of the average autocorrelation function of f(t).

16. Claims 3, 10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busack (6,020,851) in view of Eriksson (4,089,057) as applied to claim 1 above, and further in view of Purdy et al. (4,757,714).

As per claim 3, Purdy et al. (Abstract, col. 1 lines 45-59) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Purdy et al. to the inventions of Busack and Eriksson as specified above because Purdy et al. measures the speed of a skier and Eriksson monitors the speed of skiers in a ski competition.

As per claim 10, Eriksson (see at least abstract) teaches comparing the forward velocity of each of the persons and Purdy et al. (Abstract, col. 1 lines 45-59) teach the attaching of speed sensor to each person. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Purdy et al. to the inventions of Busack and Eriksson as specified above because Purdy et al. measures the speed of a skier and Eriksson monitors the speed of skiers in a ski competition.

As per claims 12 and 13, Purdy et al. (see at least abstract) teach the features of each of these claims. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Purdy et al.

to the inventions of Busack and Eriksson as specified above because then the sensor would be able to move with the person as well as not encumber the person in the sports competition.

17. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busack (6,020,851) in view of Eriksson (4,089,057) as applied to claim 1 above, and further in view of Cherdak (5,343,445).

As per claim 4, Cherdak (abstract, col. 6 lines 52-66) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Cherdak to the inventions of Busack and Eriksson as specified above because airtime would be another appropriate performance parameter to used in the skir competition of Eriksson as a skier is airborne for a period of time in a ski jump.

18. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busack (6,020,851) in view of Eriksson (4,089,057) as applied to claim 1 above, and further in view of Vlakancic et al. (4,694,694).

As per claim 5, Vlakancic et al. (see at least abstract) teach the attachment of drop distance sensors to persons from which drop distances can be acquired for comparisions. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Vlakancic et al. to the inventions of Busack and Eriksson as specified above because as taught by Vlakancic et al. (abstract) a skier may determine total vertical drop or vertical rise

encountered in a selected period, without regard to offset from movements in the opposite direction.

19. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busack (6,020,851) in view of Eriksson (4,089,057) as applied to claim 1 above, and further in view of Nasiff (4,757,453).

As per claims 6 and 7, Nasiff (Abstract, col. 2 lines 16-23) teaches the features of each of these claims. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Nasiff to the inventions of Busack and Eriksson as specified above because as taught by Nasiff (abstract) by clamping four transducers onto the body, one on each arm and one on each leg, the total integration of the four signals gives a measure of the total energy spent in motion by the body. As in most athletic activities, both arms and legs may be used over time, such as in the skiing of Eriksson, such a power sensor would be of use in performance monitoring.

20. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busack (6,020,851) in view of Eriksson (4,089,057) and Nasiff (4,757,453) as applied to claim 6 above, and further in view of Carlin (4,763,284).

As per claim 8, Carlin (see at least abstract) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Carlin to the inventions of Busack, Eriksson and Nasiff as specified above because one type of athletic performance is

boxing in which the shock or force of a given blow would be of importance in a boxing match.

21. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busack (6,020,851) in view of Eriksson (4,089,057), Nasiff (4,757,453) and Carlin (4,763,284) as applied to claim 8 above, and further in view of Vlakancic et al. (4,694,694).

As per claim 9, Vlakancic et al. (see at least abstract) teach the attachment of drop distance sensors to persons from which drop distances can be acquired for comparisions. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Vlakancic et al. to the inventions of Busack , Eriksson, Nasiff and Carlin as specified above because as taught by Vlakancic et al. (abstract) a skier may determine total vertical drop or vertical rise encountered in a selected period, without regard to offset from movements in the opposite direction.

22. The following references are cited as being art of general interest: Anderson et al. which disclose an Internet-based communications platform, Zakutin which discloses a speed-sensing projectile, Fry which discloses a sports computer and Karmel which discloses the down-loading of data wirelessly to an Internet-accessible database.

23. No claims are allowed.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 703-305-9788. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hal D Wachsman
Primary Examiner
Art Unit 2857

HW
March 23, 2002